

REMARKS/ARGUMENTS

Favorable reconsideration and allowance of the present application is respectfully requested. Claims 1-31 and 33 are pending in the above application, of which claims 1, 14 and 29 are independent. By the above amendment, claim 33 has been added, and claim 32 has been cancelled without prejudice.

The Office Action dated March 11, 2010, has been received and carefully reviewed. In that Office Action, claims 1-7, 10, 12-17, 24-26 and 29-32 were rejected under 35 U.S.C. 103(a) as being unpatentable over DE 10260030 (hereinafter, "Demuth") in view of Carpentier, claims 8 and 9 were rejected under 35 U.S.C. 103(a) as being unpatentable over Demuth in view of Carpentier and further in view of Hayashi, and claims 27 and 28 were rejected under 35 U.S.C. 103(a) as being unpatentable over Demuth in view of Carpentier and further in view of Hirao. It is believed that all claims are allowable over the art of record, and reconsideration and allowance of claims 1-31 and 33 is respectfully requested in view of the following remarks.

REJECTIONS UNDER 35 U.S.C. 103(a)

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Demuth in view of Carpentier. As amended, claim 1 recites a heat exchanger having a heat exchanger block which has pipes through which a first medium can flow on the primary side, and around which a second medium can flow on the secondary side. The pipes have flow ducts and pipe ends, and the heat exchanger includes a first end piece and a second end piece which hold the pipe ends, and each end piece has at least one base

plate, diverter plate and cover plate as well as at least one inlet chamber and/or outlet chamber which is connected to one end piece. It is possible to conduct the first medium from the inlet chamber to the outlet chamber through the flow ducts. The heat exchanger also includes a housing casing having open ends which casing surrounds the pipes and has an inlet and an outlet for the second medium. The open ends of the housing are closed by the first end piece and the second end piece. Demuth shows a heat exchanger that does not include a housing. Carpentier discloses a heat exchanger that is contained within a housing. However, neither of these references shows or suggests at least a housing having open ends closed by first and second end pieces of a heat exchanger as now claimed. Claim 1 as amended is submitted to patentably distinguish over Demuth and Carpentier for at least this reason.

Claims 2-13 and 18-28 depend from claim 1 and are submitted to be allowable for at least the same reasons as claim 1.

Claim 14 as amended recites a heat exchanger for a motor vehicle, having a heat exchanger block which has pipes, running in a longitudinal direction, through which a first medium can flow on the primary side, and around which a second medium can flow on the secondary side. The pipes have flow ducts and pipe ends, and the heat exchanger includes first and second end pieces that hold the pipe ends and that each have at least one base plate, diverter plate and cover plate as well as at least one inlet chamber and/or outlet chamber which is connected to one end piece. The first medium is conductable from the inlet chamber to the outlet chamber through the flow ducts, and a housing casing surrounds the pipes and has an inlet and an outlet for the second medium. In addition, corrugated pieces of sheet metal with longitudinal ducts running in

the longitudinal direction are arranged between the pipes.

Demuth shows fins 7 that run transversely between heat exchanger flat pipes. Nothing in the record suggests that Demuth's fins should be made to run longitudinally or that Demuth should be modified to include corrugated pieces of sheet metal with longitudinal ducts running in the longitudinal direction between the pipes as recited in claim 14. Claim 14 is submitted to be allowable over the art of record for at least this reason.

In the Advisory Action, the examiner declined to provide a reason for modifying Demuth to include corrugated pieces of sheet metal with longitudinal ducts running in the longitudinal direction as recited in claim 14. Instead, the examiner asserted that a reason for modifying Demuth has already been provided in connection with claim 1. However, it is respectfully submitted that claim 1 does not recite corrugated pieces of sheet metal with longitudinal ducts running in the longitudinal direction. If Demuth is to be modified to include such corrugated pieces of sheet metal, a reason has to be provided. The only reason provided in connection with claim 1 is "because this would allow for the heat exchange unit to be a self contained unit which would then be able to utilizes two fluids." It is respectfully submitted that this statement not constitute a reason for adding corrugated pieces of sheet metal to Demuth as recited in claim 14. It is therefore respectfully requested that if the rejection of claim 14 is maintained, the examiner explain for the record why one of ordinary skill in the art would have modified Demuth as stated in the Office Action or, alternately, how the reason for modifying Demuth presented in connection with claim 1 constitutes a reason for adding corrugated sheet metal to Demuth.

Claims 15-17 depend from claim 14 and are submitted to be allowable for at least the same reasons as claim 14.

Claim 29 as amended recites a heat exchanger for a motor vehicle that includes, inter alia, a housing casing surrounding pipes that has first and second open ends and at least one sidewall. The first and second open ends are closed by the first and second end pieces of the heat exchanger. Similar limitations appear in amended claim 1, and claim 29 as amended is submitted to be allowable over the art of record for at least the same reasons as were presented above in connection with claim 1.

Claims 30, 31 and 33 depend from claim 29 and are submitted to be allowable for at least the same reasons as claim 29. New claim 33 recites additional structural features of the invention that are not suggested by the art of record and is submitted to further distinguish over the art of record for this reason.

Most of the claim rejections are based in part on the assertion that "one of ordinary skill is capable of utilizing any shape housing...." If any of the claims remain rejected as being unpatentable over Demuth in view of Carpentier, it is respectfully requested that the examiner explain why the particular housing now claimed is obvious based on Demuth and Carpentier. The examiner has asserted that reducing the amount of material used in a housing will reduce cost and is therefore desirable. It is acknowledged that in many fields, inventors attempt to reduce an amount of material used and/or attempt to reduce costs. However, not every method of reducing material and reducing costs is obvious. For example, if the use of the structure claimed by Applicant constituted an obvious way to reduce costs and material, it seems likely that Carpentier would have used Applicant's structure instead of the more expensive,

material-wasting structure that he disclosed. Alternately, Carpentier may have selected his particular housing structure for a reason, and this disclosure provides no reason for one of ordinary skill in the art to make a housing like the one recited in the pending claims. A housing having open ends closed by the end pieces of a heat exchanger as now claimed is not a mere design choice or a mere change in the shape of Carpentier's housing. Apart from the present disclosure, nothing in the record suggests the desirability of such a housing. The art of record does not suggest the invention recited in the pending claims, and claims 1-31 and 33 are submitted to be allowable over the art of record for at least this reason.

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Demuth in view of Carpentier and further in view of Hayashi. Claims 8 and 9 depend from claim 1. Hayashi does not address the shortcomings of Demuth and Carpentier discussed above in connection with claim 1, and claims 8 and 9 are submitted to be allowable over the art of record for at least the same reasons as claim 1.

Claims 27 and 28 were rejected under 35 U.S.C. 103(a) as being unpatentable over Demuth in view of Carpentier and further in view of Hirao. Claims 27 and 28 depend from claim 1. Hirao does not address the shortcomings of Demuth and Carpentier discussed above in connection with claim 1. Claims 27 and 28 are therefore submitted to be allowable for at least the same reasons as claim 1.

CONCLUSION

Each issue raised in the Office Action dated March 11, 2010, has been addressed, and it is believed that claims 1-31 and 33 are in condition for allowance.

Wherefore, reconsideration and allowance of these claims is earnestly solicited. If the examiner believes that any additional changes would place the application in better condition for allowance, the examiner is invited to contact the undersigned attorney at the telephone number listed below.

Deposit Account Authorization

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 50-3828 and please credit any excess fees to such deposit account.

Respectfully submitted,



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